3 (L8 OR L6 OR L4 OR L2 OR "PERFLUOROHEXYLETHYLSULFONIC ACID" OR "AMMONIUM PERFLUOROHEXYLETHYLSULFONATE" OR "PERFLUOROOCTYLETHYLSULFONIC ACID" OR "AMMONIUMPERFLUOROOCTYLETHYLSULFONATE") AND (BATTERY OR "FUEL CELL")

=> d l9 1- ibib iabs
YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1024 CAPLUS
DOCUMENT NUMBER: 142:97447
TITLE: Emulsions for **fuel cells**
INVENTOR(S): Markoski, Larry J.; Waszczuk, Piotr; Kenis, Paul J. A.; Choban, Eric R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265681	A1	20041230	US 2003-608815	20030627
WO 2005001975	A2	20050106	WO 2004-US20342	20040625
WO 2005001975	A3	20060209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-608815 A 20030627
ABSTRACT:
A method for transporting a gas to an electrode in a **fuel** ***cell*** is provided, whereby the gas is dissolved in an emulsion comprising a fluorinated hydrocarbon, a surfactant and an aqueous electrolyte with a pH of at most 4 or at least 9, and the emulsion is contacted with the electrode.

L9 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:393702 CAPLUS
DOCUMENT NUMBER: 125:63190
TITLE: Mercury- and cadmium-free dry-cell **batteries**
INVENTOR(S): Watanabe, Mitsutoshi
PATENT ASSIGNEE(S): Hitachi Maxell, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08088010	A2	19960402	JP 1994-247088	19940914
PRIORITY APPLN. INFO.:			JP 1994-247088	19940914

ABSTRACT:
The **batteries** using ≤30 ppm Pb-containing Zn anodes contain F(CF2)nCH2CH2SO3H (I; n = 1-25). The electrolytes may contain 0.01-0.5% I. I may be contained in the electrolytes, the pastes for the separator manufacturing, or cathodes.

L9 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:521265 CAPLUS
DOCUMENT NUMBER: 119:121265
TITLE: Alkaline zinc **batteries** containing corrosion inhibitors
INVENTOR(S): Watanabe, Mitsutoshi; Ishiuchi, Hiroshi; Miwa, Masaru
PATENT ASSIGNEE(S): Hitachi Maxell, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05062682	A2	19930312	JP 1991-254836	19910904
PRIORITY APPLN. INFO.:			JP 1991-254836	19910904

OTHER SOURCE(S): MARPAT 119:121265
ABSTRACT:
The **batteries** contain F(CF2)n(CH2)2SO3X (I; X = H, NH4; n = 2-16) as corrosion inhibitors.

4 (L17 OR L15 OR L13 OR L11 OR "PERFLUOROHEXYLETHYLSULFONIC ACID"
OR "AMMONIUM PERFLUOROHEXYLETHYLSULFONATE" OR "PERFLUOROOCTYLET
HYLSULFONIC ACID" OR "AMMONIUMPERFLUOROOCTYLETHYLSULFONATE") AND
BLOOD

=> d l18 1- ibib iabs
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L18 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1051192 CAPLUS
DOCUMENT NUMBER: 144:270036
TITLE: Development of online solid-phase extraction-HPLC/MS/MS method for the determination of perfluorochemicals in human plasma
AUTHOR(S): Nakata, Hisao; Nakata, Ayako; Okada, Fumio; Ito, Rie; Inoue, Koichi; Saito, Koichi; Nakazawa, Hiroyuki
CORPORATE SOURCE: Dep. Analytical Chem., Hoshi Univ., 2-4-41, Ebara, Shinagawa-ku, Tokyo, 142-8501, Japan
SOURCE: Bunseki Kagaku (2005), 54(9), 877-884
CODEN: BNSKAK; ISSN: 0525-1931
PUBLISHER: Nippon Bunseki Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ABSTRACT:
A method for determining perfluorochems. (PFCs) such as perfluorooctanesulfonic acid (PFOS), paerfluorooctane sulfonamide (PFOSA), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA) and perfluorodecanoic acid (PFDA), in human plasma samples was developed by online solid-phase extraction-HPLC/MS/MS, only after deproteination with acetonitrile. The limits of detection of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma at a signal to noise (ratio of 3) were 0.08.apprx.0.14 ng/mL, and the limits of quantitation of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma were 0.50 ng/mL. The average recoveries of PFOS, PFOSA, PFOA, PFNA and PFDA ranged from 93.3 to 105% (RSD, 3.0.apprx.8.9%; n = 6). This method is more rapid and accurate, compared with the column-switching HPLC/MS method presented in previous reports. The developed method can be applied to the determination of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma samples for monitoring human exposure.

L18 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:701675 CAPLUS
DOCUMENT NUMBER: 144:102085
TITLE: Development of a method for the analysis of perfluoroalkylated compounds in whole **blood**
AUTHOR(S): Kaerrman, Anna; van Bavel, Bert; Jaemberg, Ulf; Lindstroem, Gunilla
CORPORATE SOURCE: Man-Technology-Environmental Research Centre, Oerebro University, Germany
SOURCE: Organohalogen Compounds (2004), 66(Dioxin 2004), 4003-4007
CODEN: ORCOEP; ISSN: 1026-4892
PUBLISHER: International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
ABSTRACT:
A simple and rapid method was developed for extracting perfluoroalkylated compds. from human whole **blood**. In this method, denaturation of plasma proteins was introduced prior to extraction with solid phase extraction and final determination

using high performance liquid chromatograph interfaced to a single quadr. mass spectrometer. Formic acid, C18 HF and perfluoroheptanoic acid were chosen as an internal standard The overall performance of the method was excellent with high recoveries and repeatability and low detection limits.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:701671 CAPLUS
DOCUMENT NUMBER: 144:82184
TITLE: Age dependent accumulation of perfluorinated chemicals in beef cattles
AUTHOR(S): Guruge, Keerthi Siri; Taniyasu, Sachi; Miyazaki, Shigeru; Yamanaka, Noriko; Yamashita, Nobuyoshi
CORPORATE SOURCE: National Institute of Animal Health, Tsukuba, Japan
SOURCE: Organohalogen Compounds (2004), 66(Dioxin 2004), 3979-3984
CODEN: ORCOEP; ISSN: 1026-4892
PUBLISHER: International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
ABSTRACT:
The age-related presence of perfluorinated chems. (FOCs) in **blood** plasma collected from three beef cattle from Japan was investigated. Anal. of FOCs was performed using a high performance liquid chromatograph-tandem mass spectrometer. Several FOCs were detected in beef cattle **blood** plasma with greater perfluorooctanesulfonate (PFOS) concns. compared to others. The mean PFOS concentration in age of 27 mo (530 pg/mL) was nearly 1.5 fold greater than in 9-mo old animals (370 pg/mL). However, the accumulation trend of most perfluorinated acids seems to be decreasing with the aging of cattle.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:210121 CAPLUS
DOCUMENT NUMBER: 96:210121
TITLE: Sodium biphenyl method for determination of covalently bound fluorine in organic compounds and biological materials
AUTHOR(S): Venkateswarlu, Pothapragada
CORPORATE SOURCE: Commercial Chem. Div., Commer. Chem. Div., St. Paul, MN, 55144, USA
SOURCE: Analytical Chemistry (1982), 54(7), 1132-7
CODEN: ANCHAM; ISSN: 0003-2700
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
Na biphenyl reagent is used to cleave the covalent F bonds in organic compds. The fluoride ions so released are extracted into a small volume of H2O and determined spectrophotometrically or with the F- electrode. Procedures for micro and macro analyses have been developed. Recoveries of 0.03-500 μg F from organic compds. are quant. These methods are more simple, rapid, and economical than the previously published Na biphenyl methods for the determination of F in organic compds.
The method for determination of organic F in biol. materials was validated by recovery
studies and by corroborative results of analyses based on an O bomb/gas chromatog. technique and an approach involving radioanal. techniques, whereby the difficulties, uncertainties, and inaccuracies of chemical determination of organic F in a
reference method are avoided.

5 (L26 OR L24 OR L22 OR L20 OR "PERFLUOROHEXYLETHYLSULFONIC ACID"
OR "AMMONIUM PERFLUOROHEXYLETHYLSULFONATE" OR "PERFLUOROOCTYLET
HYLSULFONIC ACID" OR "AMMONIUMPERFLUOROOCTYLETHYLSULFONATE") AND
EMULSION

=> d l27 1- ibib iabs
YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y

L27 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1024 CAPLUS
DOCUMENT NUMBER: 142:97447
TITLE: **Emulsions** for fuel cells
INVENTOR(S): Markoski, Larry J.; Waszczuk, Piotr; Kenis, Paul J. A.; Choban, Eric R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265681	A1	20041230	US 2003-608815	20030627
WO 2005001975	A2	20050106	WO 2004-US20342	20040625
WO 2005001975	A3	20060209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-608815 A 20030627
ABSTRACT:
A method for transporting a gas to an electrode in a fuel cell is provided, whereby the gas is dissolved in an **emulsion** comprising a fluorinated hydrocarbon, a surfactant and an aqueous electrolyte with a pH of at most 4 or at least 9, and the **emulsion** is contacted with the electrode.

L27 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:219904 CAPLUS
DOCUMENT NUMBER: 136:270415
TITLE: Heat-developable photographic materials containing surfactants for preventing impurity adhesion
INVENTOR(S): Yoshioka, Yasuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002082411	A2	20020322	JP 2001-203462	20010704
US 2002042034	A1	20020411	US 2001-899261	20010706
US 6783927	B2	20040831		

PRIORITY APPLN. INFO.: JP 2000-206560 A 20000707
OTHER SOURCE(S): MARPAT 136:270415
ABSTRACT:
The material, giving an image with good stability and low spot defects, has a layer containing a photosensitive Ag halide, a non-photosensitive organic Ag salt, a reductant, a binder, and a surfactant [Rf(Rc)n]mZ (Rf = perfluoroalkyl; Rc = alkylene; Z = anionic, cationic, betaine, or nonionic group; n = 0, 1; m = 1-3) on at least one side of a support.

L27 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:191747 CAPLUS
DOCUMENT NUMBER: 102:191747
TITLE: Fluorocarbon microemulsions
AUTHOR(S): Ceschin, C.; Roques, J.; Malet-Martino, M. C.; Lattes, A.
CORPORATE SOURCE: Univ. Paul Sabatier, Toulouse, 31062, Fr.
SOURCE: Journal of Chemical Technology and Biotechnology, Chemical Technology (1985), 35A(2), 73-82
CODEN: JCTTDW; ISSN: 0264-3413
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
The microemulsification of various perfluorinated (or almost completely fluorinated) oils with different perfluorinated (or almost completely fluorinated) surfactants, with or without cosurfactant, is described. Ternary or pseudoternary phase diagrams are discussed. The sizes of the monophasic areas are related to surfactant and cosurfactant nature, weight ratio surfactant/cosurfactant and oil.

L27 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1977:554709 CAPLUS
DOCUMENT NUMBER: 87:154709
TITLE: Separation of hydrocarbon phase by coagulation of aqueous **emulsions**
INVENTOR(S): Roques, Henri; Abadie, Albert; Aurelle, Yves; Calteau, Jean Paul
PATENT ASSIGNEE(S): Agence Nationale de Valorisation de la Recherche, Fr.
SOURCE: Ger. Offen., 21 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2632197	A1	19770210	DE 1976-2632197	19760716
FR 2317955	A1	19770211	FR 1975-22555	19750718
JP 52052182	A2	19770426	JP 1976-85887	19760719

PRIORITY APPLN. INFO.: FR 1975-22555 A 19750718
ABSTRACT:
To increase flow rates during separation of organic phases (especially hydrocarbons) from aqueous
phases by coagulation of **emulsions** passing through a fine-grain solid bed, the particles in the bed are coated with 0.1-10% fluorinated hydrocarbon derivs. The functional groups form stable chemical bonds to the substrate. Thus, PVC [9002-86-2] spheres of 0.2 mm diameter were coated by immersion in 1% alc.

solution of C6F13C2H4SO3C4H9 [50283-30-2], air dried 1 h at room temperature, and air
dried 1 h at 50°. A 1-10 μ diameter **emulsion** of 500 mg kerosine/L water was passed through the bed at 9.65 cm/s. A kerosine separation of 98.5% was obtained. For uncoated PVC spheres, the critical flow rate was only 0.4 cm/s.

L27 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:447311 CAPLUS
DOCUMENT NUMBER: 85:47311
TITLE: **Emulsion** polymerization or copolymerization of vinylidene fluoride
INVENTOR(S): Blaise, Jean; Grimaud, Edouard
PATENT ASSIGNEE(S): Ugine Kuhlmann, Fr.
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2542280	A1	19760408	DE 1975-2542280	19750923
DE 2542280	B2	19771027		
DE 2542280	C3	19800430		
FR 2286153	A1	19760423	FR 1974-32093	19740924
BE 833252	A1	19760310	BE 1975-159895	19750910
GB 1489957	A	19771026	GB 1975-38604	19750919
US 4025709	A	19770524	US 1975-615206	19750922
CA 1064646	A1	19791016	CA 1975-236026	19750922
SE 7510679	A	19760325	SE 1975-10679	19750923
SE 421427	B	19811221		
SE 421427	C	19820401		
NL 7511197	A	19760326	NL 1975-11197	19750923
NL 191612	B	19950703		
NL 191612	C	19951106		
JP 51057790	A2	19760520	JP 1975-114382	19750923
JP 52024950	B4	19770705		
CH 603705	A	19780831	CH 1975-12316	19750923

PRIORITY APPLN. INFO.: FR 1974-32093 A 19740924
ABSTRACT:
Polymers with controlled mol. weight and good thermal stability are prepared by peroxide-catalyzed **emulsion** polymerization of CH2:CF2, optionally with ≤15% comonomer, in the presence of 0.02-0.5% (based on H2O) alkali metal or amine salt of RfCH2CH2SO3H (Rf = C4-10 perfluoroalkyl) as emulsifier. Thus, stirring K2S2O8 0.11, NaOAc 0.11, paraffin (m. 54-6°) C8F17CH2CH2SO3Na (I) [27619-96-1] 2.4, and H2O 2000 g with CH2:CF2 at 85-90 atm and 80-5° gives a latex of polymer [24937-79-9] which can be remolded 4 times at 260° without change, held 1 week in boiling H2O without change, and heated 1 hr at 250° without blistering or discoloration. When C7F15CO2Na is used in place of I, the polymer turns gray during remolding, turns reddish-brown in boiling H2O, and becomes brown and slightly blistered at 250°.

3 ZONYL AND (FS-62 OR FS62 OR "FS 62") AND EMULSION

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YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L29 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:14485 CAPLUS
DOCUMENT NUMBER: 142:108364
TITLE: Charged **emulsions** for site-specific micrometer and nanometer scale deposition and applications in the manufacture of DNA chips
INVENTOR(S): Hastwell, Peter John; Kaethner, Timothy Mark
PATENT ASSIGNEE(S): Raustech Pty Ltd., Australia
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005000970	A1	20050106	WO 2004-AU863		20040630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004251791	A1	20050106	AU 2004-251791		20040630
PRIORITY APPLN. INFO.:			AU 2003-903296	A	20030630
			WO 2004-AU863	W	20040630

ABSTRACT:
The invention relates to novel **emulsions** which are useful for manufacture of solid phase DNA arrays of the type generally known as DNA chips. An ***emulsion*** including a continuous phase, a discontinuous phase which is immiscible in the continuous phase, and optionally a surfactant, the surfactant has a first part which is compatible with the continuous phase and a second part which is compatible with the discontinuous phase. The continuous phase has a high volume resistivity and the discontinuous phase is elec. charged. The discontinuous phase can be a reagent, a solvent which carries an active chemical reagent or a carrier liquid for a solid or insol. liquid dispersed in the discontinuous phase. The discontinuous phase also includes an activated nucleoside amidite or an activated oligonucleotide. The surfactant, if present, is selected to not significantly reduce the volume resistivity of the continuous phase. The **emulsion** can also include a charge control agent. The **emulsions** can be used for the electrostatically controlled placement of matter in a spatially defined manner from the discontinuous phase for combinatorial chemical and micrometer and nanometer scale deposition with or without reaction.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1024 CAPLUS
DOCUMENT NUMBER: 142:97447
TITLE: **Emulsions** for fuel cells
INVENTOR(S): Markoski, Larry J.; Waszczuk, Piotr; Kenis, Paul J.

A.; Choban, Eric R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265681	A1	20041230	US 2003-608815	20030627
WO 2005001975	A2	20050106	WO 2004-US20342	20040625
WO 2005001975	A3	20060209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-608815 A 20030627
ABSTRACT:
A method for transporting a gas to an electrode in a fuel cell is provided, whereby the gas is dissolved in an **emulsion** comprising a fluorinated hydrocarbon, a surfactant and an aqueous electrolyte with a pH of at most 4 or at least 9, and the **emulsion** is contacted with the electrode.

L29 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:240846 CAPLUS
DOCUMENT NUMBER: 136:280621
TITLE: Process for producing fluoroelastomers
INVENTOR(S): Lyons, Donald Frederick; Moore, Albert Lloyd; Tang, Phan Linh; Vidal, Antonio; Wehner, J. Francis
PATENT ASSIGNEE(S): Dupont Dow Elastomers L.L.C., USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024770	A1	20020328	WO 2001-US28405	20010912
US 2002037985	A1	20020328	US 2001-938695	20010824
US 6774164	B2	20040810		
EP 1319030	A1	20030618	EP 2001-970808	20010912
EP 1319030	B1	20041124		
JP 2004509993	T2	20040402	JP 2002-529178	20010912

W: CN, JP, KP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR

PRIORITY APPLN. INFO.: US 2000-234597P P 20000922
US 2001-938695 A 20010824
WO 2001-US28405 W 20010912
OTHER SOURCE(S): MARPAT 136:280621

ABSTRACT:
An **emulsion** polymerization process for the production of fluoroelastomers is disclosed, wherein a partially fluorinated anionic surfactant of the formula F(CF2CF2)nCH2CH2SO3M (I), where n is an integer from 2 to 9, or mixts. thereof, and M is a cation having a valence of 1, is used as the dispersing agent. I is used to replace NH4 perfluorooctanoate.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS

38 L17 OR L15 OR L13 OR L11 AND "OXYGEN CARRIER" AND ZONYL

=> d l18 1- ibib iabs
YOU HAVE REQUESTED DATA FROM 38 ANSWERS - CONTINUE? Y/(N):y

L18 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:76428 CAPLUS
DOCUMENT NUMBER: 144:159912
TITLE: Perfluoroalkylalkylsulfonic acid compositions for forming antireflective films
INVENTOR(S): Matsuo, Jiro; Takano, Kiyoshi
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006023450	A2	20060126	JP 2004-200465	20040707
PRIORITY APPLN. INFO.:			JP 2004-200465	20040707

ABSTRACT:
The compns. contain (perfluorolalkyl)alkylsulfonic acids expressed by CnF2n+1(CH2CH2)mSO3H (n = integer of 1-20, m = integer of 1-20), and N-substituted ethylenediamines and/or N-alkylmorpholines. Preferably, the acids have (n = 4-12, m = 1). In spite of free from perfluorocompounds, the compns. provide time-course stable films.

L18 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:29741 CAPLUS
DOCUMENT NUMBER: 144:119421
TITLE: Composition for antireflection coating and method for forming pattern using same
INVENTOR(S): Matsuo, Jirou; Takano, Kiyofumi; Takano, Yusuke; Akiyama, Yasushi
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan; Az Electronic Materials (Japan) K.K.
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006003958	A1	20060112	WO 2005-JP12001	20050629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,

KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2004-194423 A 20040630

ABSTRACT:
Disclosed is a composition for antireflection coatings which has especially excellent application characteristics while maintaining performance as an anti-reflective film. Also disclosed is a method for forming a pattern using such a composition Specifically disclosed is a composition for antireflection coatings which contains at least the following components (A), (B), (C), (D) and (E), (A) a perfluoroalkyl alkylene-sulfonic acid represented by the following general formula (1): CnF2n+1(CH2CH2)mSO3H (in this formula, n represents an integer of 1-20 and m represents an integer of 0-20.) (B) an organic amine (C) a water-soluble polymer (D) a perfluoroalkyl-Et group-containing compound represented by the following general formula (2): CkF2k+1CH2CH2-X-Y (in this formula, k represents an integer of 1-20); X represents a single bond or a divalent linking group; and Y represents an anionic group or a nonionic group. This compound has a structure different from that of the component (A).

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1131920 CAPLUS

DOCUMENT NUMBER: 144:32925

TITLE: Analysis of fluorotelomer alcohols, fluorotelomer acids, and short- and long-chain perfluorinated acids in water and biota

AUTHOR(S): Taniyasu, Sachi; Kannan, Kurunthachalam; So, Man Ka; Gulkowska, Anna; Sinclair, Ewan; Okazawa, Tsuyoshi; Yamashita, Nobuyoshi

CORPORATE SOURCE: National Institute of Advanced Industrial Science and Technology (AIST), 16-1 Onogawa, Tsukuba, Ibaraki, 305-8569, Japan

SOURCE: Journal of Chromatography, A (2005), 1093(1-2), 89-97
CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:
Fluorotelomer alcs. and fluorotelomer acids have been proposed as a source of the perfluorinated carboxylic acids found in remote marine locations. To examine the sources and fate of perfluorinated acids in the environment, a method to determine a wide range of poly- and perfluorinated acids in environmental and biol. matrixes is needed. A method was developed to measure a suite of neutral and acidic fluorochems. including, fluorotelomer alcs., fluorotelomer acids, and short- and long-chain perfluorinated acids, in water and biol. samples. The method involves solid-phase extraction with weak anion exchange (WAX) cartridges, followed by sequential elution with sodium acetate buffer, methanol, and 0.1% NH4OH in methanol. For biol. samples, prior to solid-phase extraction, tissues are digested in 0.5N potassium hydroxide/methanol, diluted in water, and passed through the WAX cartridge. Neutral compds. and telomer alcs. are separated from other poly- and perfluorinated acids. The method is robust (i.e., capable of measuring neutral and acidic compds.), and can be applied for the anal. of a range of poly- and perfluorinated acids, including telomer alcs., telomer acids, perfluoroalkylcarboxylates, and perfluoroalkylsulfonates in water and biota. With the use of high-performance liquid chromatog.-tandem mass spectrometry (HPLC-MS/MS), a method detection limit in the range of several tens to hundreds of parts-per-quadrillion (pg/L) in water and at a few tens to hundreds of parts-per-trillion (pg/g) levels in biol. matrixes can be achieved.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1051192 CAPLUS
DOCUMENT NUMBER: 144:270036
TITLE: Development of online solid-phase extraction-HPLC/MS/MS method for the determination of perfluorochemicals in human plasma
AUTHOR(S): Nakata, Hisao; Nakata, Ayako; Okada, Fumio; Ito, Rie; Inoue, Koichi; Saito, Koichi; Nakazawa, Hiroyuki
CORPORATE SOURCE: Dep. Analytical Chem., Hoshi Univ., 2-4-41, Ebara, Shinagawa-ku, Tokyo, 142-8501, Japan
SOURCE: Bunseki Kagaku (2005), 54(9), 877-884
CODEN: BNSKAK; ISSN: 0525-1931
PUBLISHER: Nippon Bunseki Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ABSTRACT:
A method for determining perfluorochems. (PFCs) such as perfluorooctanesulfonic acid (PFOS), paerfluorooctane sulfonamide (PFOSA), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA) and perfluorodecanoic acid (PFDA), in human plasma samples was developed by online solid-phase extraction-HPLC/MS/MS, only after deproteination with acetonitrile. The limits of detection of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma at a signal to noise (ratio of 3) were 0.08.apprx.0.14 ng/mL, and the limits of quantitation of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma were 0.50 ng/mL. The average recoveries of PFOS, PFOSA, PFOA, PFNA and PFDA ranged from 93.3 to 105% (RSD, 3.0.apprx.8.9%; n = 6). This method is more rapid and accurate, compared with the column-switching HPLC/MS method presented in previous reports. The developed method can be applied to the determination of PFOS, PFOSA, PFOA, PFNA and PFDA in human plasma samples for monitoring human exposure.

L18 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:701675 CAPLUS
DOCUMENT NUMBER: 144:102085
TITLE: Development of a method for the analysis of perfluoroalkylated compounds in whole blood
AUTHOR(S): Kaerrman, Anna; van Bavel, Bert; Jaemberg, Ulf; Lindstroem, Gunilla
CORPORATE SOURCE: Man-Technology-Environmental Research Centre, Oerebro University, Germany
SOURCE: Organohalogen Compounds (2004), 66(Dioxin 2004), 4003-4007
CODEN: ORCOEP; ISSN: 1026-4892
PUBLISHER: International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
ABSTRACT:
A simple and rapid method was developed for extracting perfluoroalkylated compds. from human whole blood. In this method, denaturation of plasma proteins was introduced prior to extraction with solid phase extraction and final determination using high
performance liquid chromatograph interfaced to a single quadr. mass spectrometer. Formic acid, C18 HF and perfluoroheptanoic acid were chosen as an internal standard The overall performance of the method was excellent with high recoveries and repeatability and low detection limits.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:701671 CAPLUS
DOCUMENT NUMBER: 144:82184

TITLE: Age dependent accumulation of perfluorinated chemicals in beef cattles
AUTHOR(S): Guruge, Keerthi Siri; Taniyasu, Sachi; Miyazaki, Shigeru; Yamanaka, Noriko; Yamashita, Nobuyoshi
CORPORATE SOURCE: National Institute of Animal Health, Tsukuba, Japan
SOURCE: Organohalogen Compounds (2004), 66(Dioxin 2004), 3979-3984
CODEN: ORCOEP; ISSN: 1026-4892
PUBLISHER: International Symposium on Halogenated Environmental Organic Pollutants and Persistent Organic Pollutants
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
ABSTRACT:
The age-related presence of perfluorinated chems. (FOCs) in blood plasma collected from three beef cattle from Japan was investigated. Anal. of FOCs was performed using a high performance liquid chromatograph-tandem mass spectrometer. Several FOCs were detected in beef cattle blood plasma with greater perfluorooctanesulfonate (PFOS) concns. compared to others. The mean PFOS concentration in age of 27 mo (530 pg/mL) was nearly 1.5 fold greater than in 9-mo old animals (370 pg/mL). However, the accumulation trend of most perfluorinated acids seems to be decreasing with the aging of cattle.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:554784 CAPLUS
DOCUMENT NUMBER: 143:207343
TITLE: Validation of a screening method based on liquid chromatography coupled to high-resolution mass spectrometry for analysis of perfluoroalkylated substances in biota
AUTHOR(S): Berger, Urs; Haukas, Marianne
CORPORATE SOURCE: Norwegian Institute for Air Research (NILU), Polar Environmental Centre, Tromso, NO-9296, Norway
SOURCE: Journal of Chromatography, A (2005), 1081(2), 210-217
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
A screening method for anal. of perfluoroalkylated substances (PFAS) in biota samples has been developed and validated using liver samples from polar cod (Boreogadus saida) and glaucous gull (Larus hyperboreus). The method was based on extraction of target compds. from homogenized samples into the solvent mixture used
as mobile phase in high-performance liquid chromatog. (HPLC), i.e. methanol/water (50:50; 2 mM ammonium acetate). The extract was filtered and directly injected into a HPLC/time-of-flight mass spectrometry (TOF-MS) system. Quantification was performed using 7H-perfluoroheptanoic acid as internal standard and a calibration standard solution dissolved in sample extract for each matrix type (matrix-matched calibration standard). The method is very time and cost efficient. Except for long-chain compds. and perfluorooctane sulfonamide (which cannot be covered by this method), recoveries were between 60% and 115% and method detection limits were in the range 0.04-1.3 ng/g wet weight Blank values could be neglected with the exception of perfluorooctane sulfonate (PFOS), perfluorohexanoic acid (PFHxA) and perfluorooctanoic acid (PFOA). One of the major challenges in PFAS anal. is ionization disturbance by co-eluting matrix in the ion source of the mass spectrometer. Both matrix and analyte specific signal enhancement and suppression was observed and quantified. Repeated extns. (n = 3) gave relative standard deviations (RSD) <35% for all PFAS. Accuracy was examined by comparing the screening method to the generally applied ion pair extraction (IPE) method. PFAS concentration values of a glaucous gull liver sample deviated by less than 30% for the two methods, provided that matrix-matched

calibration stds. were employed in both methods.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1024 CAPLUS
DOCUMENT NUMBER: 142:97447
TITLE: Emulsions for fuel cells
INVENTOR(S): Markoski, Larry J.; Waszczuk, Piotr; Kenis, Paul J. A.; Choban, Eric R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265681	A1	20041230	US 2003-608815	20030627
WO 2005001975	A2	20050106	WO 2004-US20342	20040625
WO 2005001975	A3	20060209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-608815 A 20030627
ABSTRACT:
A method for transporting a gas to an electrode in a fuel cell is provided, whereby the gas is dissolved in an emulsion comprising a fluorinated hydrocarbon, a surfactant and an aqueous electrolyte with a pH of at most 4 or at least 9, and the emulsion is contacted with the electrode.

L18 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:874073 CAPLUS
DOCUMENT NUMBER: 141:372707
TITLE: Heat developable recording media
INVENTOR(S): Fukawa, Junichi
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004294796	A2	20041021	JP 2003-87514	20030327

PRIORITY APPLN. INFO.: JP 2003-87514 20030327
OTHER SOURCE(S): MARPAT 141:372707
ABSTRACT:
Title recording material comprises a substrate and a photosensitive layer containing photosensitive silver halide particles and reducing agents and is

characterized by containing compound Rf(L1)m1(Y1)n1X (Rf = fluorine-containing aliphatic
group; L1 = bivalent group; Y1 = alkylene, oxyalkylene; X = H, OH, anionic group, cationic group; m1 = 0, 1-5; n1 = 1-40).

L18 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:677757 CAPLUS
DOCUMENT NUMBER: 141:173870
TITLE: Preparation of fluoroalkyl-containing sulfonic acids from sulfonyl halides
INVENTOR(S): Otaguro, Tsuneyuki; Matsuo, Jiro; Sakamoto, Takaaki; Takano, Kiyoshi
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004231570	A2	20040819	JP 2003-21929	20030130
PRIORITY APPLN. INFO.:			JP 2003-21929	20030130

OTHER SOURCE(S): CASREACT 141:173870; MARPAT 141:173870
ABSTRACT:
The sulfonic acids are prepared by dehydrogenation of fluoroalkyl-containing sulfonyl
halides in alcs. A MeOH solution of 50 g F3C(CF2)7(CH2)2SO2Cl was refluxed for 5 h to give 51.2 g F3C(CF2)7(CH2)2SO3H with Cl ion content 0.016%.

L18 ANSWER 11 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:87906 CAPLUS
DOCUMENT NUMBER: 140:222706
TITLE: Quantitative Determination of Fluorotelomer Sulfonates in Groundwater by LC MS/MS
AUTHOR(S): Schultz, Melissa M.; Barofsky, Douglas F.; Field, Jennifer A.
CORPORATE SOURCE: Department of Chemistry and Department of Environmental and Molecular Toxicology, Oregon State University, Corvallis, OR, 97331, USA
SOURCE: Environmental Science and Technology (2004), 38(6), 1828-1835
CODEN: ESTHAG; ISSN: 0013-936X
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
Aqueous film-forming foams (AFFF) are complex mixts. containing fluorocarbon- and hydrocarbon-based surfactants used to fight hydrocarbon-fueled fires. The military is the largest consumer of AFFF in the US; fire-training activities conducted at military bases have polluted groundwater by un-spent fuel and AFFF chems. A direct-injection, liquid-chromatog. tandem mass spectrometry (LC MS/MS) method was developed to quantify fluorotelomer sulfonate surfactants in groundwater collected from military bases where fire-training activities were conducted. The 4:2, 6:2, and 8:2 fluorotelomer sulfonates were detected and quantified in groundwater from 2 of 3 military bases. Total fluorotelomer sulfonate concns. observed at Wurtsmith Air Force Base, Michigan, and Tyndall Air Force Base, Florida, ranged from below quantitation (≤0.60) to 182 μg/L and from 1100 to 14 600 μg/L, resp. Analyses of a fluorotelomer-based AFFF concentrate by neg. ion fast atom bombardment/mass spectrometry and LC MS/MS analyses indicated the AFFF concentrate contains only a

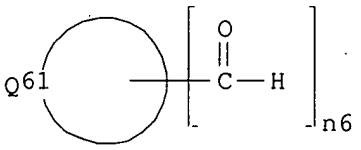
small amount of fluorotelomer sulfonates and that fluoroalkylthioamido sulfonates are the main anionic fluoro-surfactant in the mixts. More research is needed to determine the environmental fate of fluoroalkylthioamido sulfonates.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 12 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:77983 CAPLUS
DOCUMENT NUMBER: 140:136370
TITLE: Heat-developable photographic material containing fluorosurfactant and hardener
INVENTOR(S): Kuruma, Koji; Yasuda, Shoji; Yanagi, Terukazu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 89 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004029395	A2	20040129	JP 2002-185837	20020626
PRIORITY APPLN. INFO.:			JP 2002-185837	20020626

OTHER SOURCE(S): MARPAT 140:136370
GRAPHIC IMAGE:



I

ABSTRACT:
The material has ≥1 image forming layer containing at least an organic Ag salt, a photosensitive Ag halide, a binder, a reducing agent, the fluorosurfactant RfDX(SO2)nDW (RfD = F-substituted alkyl; X = bivalent linkage except sulfonyl; W = group having an anionic, cationic, betaine, or nonionic polar group for surface activity; nD = 0, 1), and one of X11R11C:CR12R13 (R11-13 = H, monovalent substituent; X11 = electron donative heterocycle without S, cycloalkyloxy, cycloalkylthio, cycloalkylamino, cycloalkenyl), (R21L21n2)X21C:CR22R23 (R21 = alkyl; R22, R23 = H, monovalent substituent; X21 = electron attractive group; L21 = aromatic carbocyclic group; n2 = 0, 1), X31(CN)C:CR31R32 (X31 = electron attractive heterocycle, halo, halo alkyl; one of R31 and R32 is H and the other is OH), R41R42R43SiNA41NA42G41n4R44 (R41-44, A41, A42 = H, monovalent substituent; G41 = bivalent linkage; n4 = 0, 1), R51R52R53CCOH (R51-53 = monovalent substituent), and I (Q61 = atoms required to form an aromatic carbocyclic or heterocyclic ring; n6 = 1-6). It shows low fog, high contrast and Dmax, and improved coated surface.

L18 ANSWER 13 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:272154 CAPLUS
DOCUMENT NUMBER: 138:311466
TITLE: Color diffusion-transfer photographic film unit for

formation of uniform image at low temperature
INVENTOR(S): Sawada, Satoru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 95 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003107646	A2	20030409	JP 2001-304702	20010928
PRIORITY APPLN. INFO.:			JP 2001-304702	20010928

OTHER SOURCE(S): MARPAT 138:311466
ABSTRACT:
The film unit contains a fluorosurfactant represented by [Rf(Rc)n]mZ (Rf = perfluoroalkyl; Rc = alkylene; Z = anionic, cationic, betaine, or nonionic polar groups required for applying surfactant property; n = 1; m = 1-3), so that the film unit is developed in the presence of the fluorosurfactant. Uniform images with high Dmax, low Dmin, and high lightfastness can be formed in the film unit even under development at low temperature (≤20°).

L18 ANSWER 14 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:799385 CAPLUS
DOCUMENT NUMBER: 138:376268
TITLE: Collapse behavior of single layer 193- and 157-nm resists: use of surfactants in the rinse to realize the sub-130-nm nodes
AUTHOR(S): Hien, Stefan; Rich, Georgia K.; Molina, Gilbert; Cao, Heidi B.; Nealey, Paul F.
CORPORATE SOURCE: Infineon Technologies, Austin, TX, USA
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2002), 4690(Pt. 1, Advances in Resist Technology and Processing XIX), 254-261
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
The authors determined the dimension dependent onset of pattern collapse for different 193 and 157 nm resist platforms, and explored production relevant techniques to suppress pattern collapse. Test structures were designed and implemented to generate well-defined capillary forces on beams of resist during drying. X-ray and 193 nm (using alternating phase shifting masks) lithog. were used to print test structures and patterns of dense lines with critical dimensions as small as 100 nm. The collapse behavior was quantified in terms of the critical aspect ratio for collapse as a function of the spacing between structures. The resist platforms exhibited different collapse behavior at line widths of greater than 150 nm, but at line widths of 100 nm and less, all of the resist structures collapsed with aspect ratios > 3. A principal conclusion from this work is that changes in resist chemical or formulation alone will not be sufficient to solve the collapse problem at the 100 nm node and below. The most effective strategy to suppress the resist collapse is to reduce the capillary forces that act on the structures during drying. For 193 nm resists, collapse behavior was quantified for a number of surfactants that were added to the rinse liquid The authors demonstrate that with a simple modification of the final rinse and drying process, they could increase the critical aspect ratio from 4.2 to 5.2 at a spacing of 110 nm for a champion resist. This means, for example, that the authors can image 110 nm dense lines with the surfactant rinse at a thickness of 575 nm whereas without surfactant we were limited to 460 nm. The results are interpreted in terms of the contact angles of rinse liqs. on the resists and their resp. surface tensions.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 15 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:465640 CAPLUS
DOCUMENT NUMBER: 137:54541
TITLE: Heat-developable photographic films containing specific nucleating agent and specific surfactant
INVENTOR(S): Goto, Takahiro; Yamaguchi, Tetsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002174876	A2	20020621	JP 2001-236484	20010803
US 2003008251	A1	20030109	US 2001-962449	20010926
US 6548240	B2	20030415		
PRIORITY APPLN. INFO.:			JP 2000-293867 A	20000927
OTHER SOURCE(S):	MARPAT 137:54541			

ABSTRACT:
The invention relates to a heat-developable photog. film having a light-insensitive silver salt, a light-sensitive silver halide, and a binder, wherein the photog. film contains a nucleating agent and surfactant [Rf-(Rc)n]m-Z (Rf = perfluoroalkyl; Rc = alkylene; Z = anionic, cationic , nonionic, etc. group; n = 0,1; m = 1-3 integer). The film shows the low fogging and high Dmax.

L18 ANSWER 16 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:427820 CAPLUS
DOCUMENT NUMBER: 137:13197
TITLE: Processing method at low replenishment rate for silver halide photographic material
INVENTOR(S): Kuze, Akira
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002162722	A2	20020607	JP 2000-359052	20001127
PRIORITY APPLN. INFO.:			JP 2000-359052	20001127
OTHER SOURCE(S):	MARPAT 137:13197			

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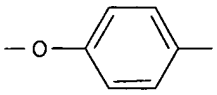

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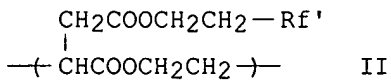

II

ABSTRACT:
The method is characterized by replenishing a stabilization solution containing RfXmYnA [Rf = ≥1 F-containing (un)saturated aliphatic group; X = sulfonamide, (substituted) alkylene oxide, I, II; Y = (substituted) alkylene oxide, alkylene; Rf' = ≥1 F-containing (un)saturated hydrocarbon; A = H, hydrophilic group such as SO3M, OSO3M, CO2M, OPO3M1M2, PO3M1M2; M, M1, M2 = Li, K, Na, NH4; m = 0-5; n = 0-40] into a stabilization bath at the rate ≤800 mL/m2. A solid stabilizing agent containing the above compound may be added into the bath directly and replenished with water ≤800 mL/m2. The method prevents dirt deposition, reducing a waste solution

L18 ANSWER 17 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:219904 CAPLUS
DOCUMENT NUMBER: 136:270415
TITLE: Heat-developable photographic materials containing surfactants for preventing impurity adhesion
INVENTOR(S): Yoshioka, Yasuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002082411	A2	20020322	JP 2001-203462	20010704
US 2002042034	A1	20020411	US 2001-899261	20010706
US 6783927	B2	20040831		

PRIORITY APPLN. INFO.: JP 2000-206560 A 20000707
OTHER SOURCE(S): MARPAT 136:270415
ABSTRACT:
The material, giving an image with good stability and low spot defects, has a layer containing a photosensitive Ag halide, a non-photosensitive organic Ag salt, a reductant, a binder, and a surfactant [Rf(Rc)n]mZ (Rf = perfluoroalkyl; Rc = alkylene; Z = anionic, cationic, betaine, or nonionic group; n = 0, 1; m = 1-3) on at least one side of a support.

L18 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:729795 CAPLUS
DOCUMENT NUMBER: 135:290284
TITLE: Color ink jet ink composition with fluorosurfactant
INVENTOR(S): Ma, Zeying; Stramel, Rodney D.; Yue, Shunqiong; Lu, Kai-kong; Chou, Hsin-chieh; Canfield, Duane G.
PATENT ASSIGNEE(S): Hewlett-Packard Co., USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1138729	A1	20011004	EP 2001-302449	20010316
EP 1138729	B1	20050112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6436180	B1	20020820	US 2000-540102	20000331
JP 2001335725	A2	20011204	JP 2001-103015	20010402

PRIORITY APPLN. INFO.: US 2000-540102 A 20000331

ABSTRACT:
An ink jet ink composition suitable for large format printers for printing on both porous, non-porous, and hybrid glossy media providing substantially instant ink drying, light fastness and excellent image quality, comprises at least one water-soluble dye and a vehicle comprising at least one co-solvent and at least two different surfactants (with a total surfactant concentration of 0.1-5 wt%), a non-ionic surfactant (0.05-3 wt%) and a fluoro-surfactant (0.001-3 wt%). The low viscosity ink, excellent in pen reliability such as long decap time, no decel, no kogation, and good drop directionality, passes harsh pen material compatibility tests with no puddling on the surface of the orifice plate in the default pen.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:842181 CAPLUS
DOCUMENT NUMBER: 134:29810
TITLE: Aqueous dispersions of fluoropolymers and their production using fluorinated surfactants
INVENTOR(S): Morgan, Richard Alan; Jones, Clay Woodward; Hirvnak, Jeffrey; Treat, Theodore
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071590	A1	20001130	WO 2000-US14009	20000519
W: CU, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1189953	A1	20020327	EP 2000-936159	20000519
EP 1189953	B1	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003500495	T2	20030107	JP 2000-619980	20000519

PRIORITY APPLN. INFO.: US 1999-135074P P 19990520
WO 2000-US14009 W 20000519

ABSTRACT:
Aqueous dispersion polymerization of fluoromonomers is improved by using a combination of
fluorosurfactants, one of which is a perfluoropolyether carboxylic acid or salt. In an example, hexafluoropropylene is copolymd. with tetrafluoroethylene in water containing Zonyl FS-62 (sulfo) and Krytox 157 FSH (carboxy) surfactants. Reaction time was reduced by incorporation of the second surfactant.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 20 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:270722 CAPLUS
DOCUMENT NUMBER: 126:251593
TITLE: Fluoroalkylsulfonate dispersing agents for tetrafluorethylene polymerization
INVENTOR(S): Baker, Bruce Edward; Zipfel, Roger John
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708214	A1	19970306	WO 1996-US13679	19960823
W: JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5789508	A	19980804	US 1996-685085	19960723
US 5688884	A	19971118	US 1996-700258	19960820
EP 847407	A1	19980617	EP 1996-929036	19960823
EP 847407	B1	20021023		
R: DE, FR, GB, IT, NL				
JP 11512133	T2	19991019	JP 1997-510486	19960823
JP 3626202	B2	20050302		

PRIORITY APPLN. INFO.:

US 1995-3085P	P	19950831
US 1995-3097P	P	19950831
US 1996-685085	A	19960723
US 1996-700258	A	19960820
WO 1996-US13679	W	19960823

ABSTRACT:
The title agents C6F13C2H4SO3M (M = monovalent cation) are used for the aqueous dispersion polymerization of perfluorinated copolymerizable monomer, giving high mol.
weight PTFE with raw dispersion particle size 0.15-0.35 μm.

L18 ANSWER 21 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:393702 CAPLUS
DOCUMENT NUMBER: 125:63190
TITLE: Mercury- and cadmium-free dry-cell batteries
INVENTOR(S): Watanabe, Mitsutoshi
PATENT ASSIGNEE(S): Hitachi Maxell, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08088010	A2	19960402	JP 1994-247088	19940914

PRIORITY APPLN. INFO.:

JP 1994-247088		19940914

ABSTRACT:
The batteries using ≤30 ppm Pb-containing Zn anodes contain F(CF2)nCH2CH2SO3H (I; n = 1-25). The electrolytes may contain 0.01-0.5% I. I may be contained in the electrolytes, the pastes for the separator manufacturing, or cathodes.

L18 ANSWER 22 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:521265 CAPLUS
DOCUMENT NUMBER: 119:121265
TITLE: Alkaline zinc batteries containing corrosion inhibitors
INVENTOR(S): Watanabe, Mitsutoshi; Ishiuchi, Hiroshi; Miwa, Masaru
PATENT ASSIGNEE(S): Hitachi Maxell, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05062682	A2	19930312	JP 1991-254836	19910904
PRIORITY APPLN. INFO.:			JP 1991-254836	19910904

OTHER SOURCE(S): MARPAT 119:121265
ABSTRACT:
The batteries contain F(CF2)n(CH2)2SO3X (I; X = H, NH4; n = 2-16) as corrosion inhibitors.

L18 ANSWER 23 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:494537 CAPLUS
DOCUMENT NUMBER: 115:94537
TITLE: Coating compositions comprising fluorine-containing polyamides
INVENTOR(S): Battersby, Graham Charles; Darby, Paul Richard; Hadaway, Andrew Robert; Leonard, Michael William
PATENT ASSIGNEE(S): Coates Brothers PLC, UK
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9103523	A1	19910321	WO 1990-GB1389	19900907
W: AU, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
GB 2238792	A1	19910612	GB 1989-20238	19890907
ZA 9007091	A	19910731	ZA 1990-7091	19900906
AU 9063583	A1	19910408	AU 1990-63583	19900907
EP 490954	A1	19920624	EP 1990-913508	19900907
EP 490954	B1	19950412		
R: DE, FR, GB				
PRIORITY APPLN. INFO.:			GB 1989-20238 A	19890907
			WO 1990-GB1389 A	19900907

ABSTRACT:
The title compns. with good blocking resistance contain film-forming polymers containing fluoro polyamides prepared from polymeric fatty acids. Thus, a coating contained Mowtol B30H, a polyurethane, polyethyleneimine, and a polyamide prepared from dimer fatty acid, propionic acid, monomeric fatty acid, hexamethylene diamine, ethylene diamine, and C8F17C2H4CO2H.

L18 ANSWER 24 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:592978 CAPLUS

DOCUMENT NUMBER: 113:192978
TITLE: Heat-resistant fluoropolymer composition as cladding for optical fibers
INVENTOR(S): Yamamoto, Takashi; Matsumoto, Tsuruyoshi; Kobayashi, Tadao; Shimada, Katsuhiko
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 357354	A2	19900307	EP 1989-308657	19890825
EP 357354	A3	19910911		
EP 357354	B1	19941026		
R: DE, GB, IT, NL				
JP 02153964	A2	19900613	JP 1989-214885	19890823
JP 08019317	B4	19960228		
US 5117480	A	19920526	US 1991-642567	19910118
US 5223561	A	19930629	US 1991-802858	19911206
PRIORITY APPLN. INFO.:			JP 1988-212339 A	19880829
			US 1989-398917 B1	19890828
			US 1991-642567 A3	19910118

ABSTRACT:
A fluoro polymer composition, having good heat and thermal degradation resistance and
processability, and useful as a cladding for optical fibers, comprises 60-99.8% copolymer of perfluoro-2,2-dimethyl-1,3-dioxole (I) with ≥1 ethylenically unsatd. monomer and 0.2-40% a compound having hydrocarbon group containing ≥1 F atom and ≥1 functional group selected from the group of OH, SR, CO2H, SO, SO2, CONH, CO2CO, NH, CONHCO, CO2, CN, NCO, CO, HCO2, NH2, SO3H, NHNH2, CONH2, CH:CH2, NH, (RO)nX3-nSi (R = C1-5 alkyl; n = 0-3; X halogen, C1-5 alkyl). Thus, a solution of 100 weight parts I-tetrafluoroethylene copolymer and 2 weight parts 3,3,3-trifluoropropyltrimethoxysilane and Florinate FC-75 (containing 25 weight% solids) was coated onto the surface of a quartz glass fiber and then dried at 100° to form a core cladding. The optical fiber showed a light attenuation 10.5 dB/km at 850 nm, and an increase in light attenuation of 1 dB/km after aging for 4000 h at 150°.

L18 ANSWER 25 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:192252 CAPLUS
DOCUMENT NUMBER: 110:192252
TITLE: Process for preparing (perfluoroalkylalkyl)sulfonates
INVENTOR(S): Goldbaum, Richard H.; Remington, William R.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4784809	A	19881115	US 1986-879464	19860627
PRIORITY APPLN. INFO.:			US 1986-879464	19860627

OTHER SOURCE(S): CASREACT 110:192252
ABSTRACT:
Title compds. CnF2n+1(CH2)mSO3M (I; M = H, NH4; n = 1-20; m = 2-20), useful as surfactants and intermediates for water/oil repellents, are prepared by oxidation of

thiocyanate CnF2n+1(CH2)mSCN (II) with a peroxycarboxylic acid R(CO3H)a (R = alkyl, aralkyl, cycloalkyl, aryl, heterocyclyl; a = 1,2). To a stirred mixture of thiocyanate II (n = 6,8,10,16, etc.; m = 2) at 75° was added slowly 35% AcO3H in 3.8 h with cooling at 65-70° and the resultant mixture was held at .apprx.65° for addnl. 19 h to give 72.1% sulfonic acid derivs. I (M = H; n, m = as defined above).

L18 ANSWER 26 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:191747 CAPLUS
DOCUMENT NUMBER: 102:191747
TITLE: Fluorocarbon microemulsions
AUTHOR(S): Ceschin, C.; Roques, J.; Malet-Martino, M. C.; Lattes, A.
CORPORATE SOURCE: Univ. Paul Sabatier, Toulouse, 31062, Fr.
SOURCE: Journal of Chemical Technology and Biotechnology, Chemical Technology (1985), 35A(2), 73-82
CODEN: JCTTDW; ISSN: 0264-3413
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
The microemulsification of various perfluorinated (or almost completely fluorinated) oils with different perfluorinated (or almost completely fluorinated) surfactants, with or without cosurfactant, is described. Ternary or pseudoternary phase diagrams are discussed. The sizes of the monophasic areas are related to surfactant and cosurfactant nature, weight ratio surfactant/cosurfactant and oil.

L18 ANSWER 27 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:210121 CAPLUS
DOCUMENT NUMBER: 96:210121
TITLE: Sodium biphenyl method for determination of covalently bound fluorine in organic compounds and biological materials
AUTHOR(S): Venkateswarlu, Pothapragada
CORPORATE SOURCE: Commercial Chem. Div., Commer. Chem. Div., St. Paul, MN, 55144, USA
SOURCE: Analytical Chemistry (1982), 54(7), 1132-7
CODEN: ANCHAM; ISSN: 0003-2700
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
Na biphenyl reagent is used to cleave the covalent F bonds in organic compds. The fluoride ions so released are extracted into a small volume of H2O and determined spectrophotometrically or with the F- electrode. Procedures for micro and macro analyses have been developed. Recoveries of 0.03-500 μg F from organic compds. are quant. These methods are more simple, rapid, and economical than the previously published Na biphenyl methods for the determination of F in organic compds.
The method for determination of organic F in biol. materials was validated by recovery
studies and by corroborative results of analyses based on an O bomb/gas chromatog. technique and an approach involving radioanal. techniques, whereby the difficulties, uncertainties, and inaccuracies of chemical determination of organic F in a
reference method are avoided.

L18 ANSWER 28 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1978:588075 CAPLUS
DOCUMENT NUMBER: 89:188075
TITLE: Fluorinated additivities for surface treatment baths
PATENT ASSIGNEE(S): Societe Continentale Parker, Fr.

SOURCE: Fr. Demande, 13 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2332972	A1	19770624	FR 1975-36130	19751126
FR 2332972	B1	19790119		

PRIORITY APPLN. INFO.: FR 1975-36130 A 19751126
ABSTRACT:
Fluorinated additives for surface treatment baths have the general formula [CnF2n+1CH2CH2NR,R',R'']+X- in which CnF2n+1 represents a perfluorinated straight chain and n is between 1 and 20, X- is an anion selected from a halogen, sulfate, alkyl sulfate, phosphate, sulfonate, alkanesulfonate, arylsulfonate, acetate or hydroxide. For the R, R', and R'' groups, when R is an alkyl radical containing 1 to 8 C atoms, R' and R'' may be the same or different and are alkyl radicals containing 1 to 8 C atoms, cycloalkyl radicals containing 5 to
10 C atoms, alkenyl radicals containing 3 to 8 C atoms, cycloalkenyl radicals containing 5 to 9 C atoms or aryl radicals or R' and R'' together may constitute cycloalkyl radicals containing 4 to 9 C atoms, cycloalkenyl radicals containing 4 to 9
C atoms or cyclodiene radicals containing 4 to 9 C atoms. Also, RR'R'' together constitute an aromatic tertiary amine derivative of pyridine containing 5 to 18 C atoms,
pyridine, picoline, quinoline or isoquinoline or acridine. These additives lower the surface tension of Cr, Ni, and cyanide Cu electroplating baths and also Cr etching baths for plastics prior to plating. Their effect lasts much longer than normally used additives. Some examples are the use of 0.1 g C8F17C2H4SO3H/L for decorative Cr, 0.15 g C6F13C2H4SO3H/L for hard Cr, and 0.1 g C7F15C2H4SO3H/L for self-regulating Cr electroplating baths. An ABS etching bath of chromic and sulfuric acids uses 0.5 g [C8F17C2H4N(Me)(C2H4OH)2]+I-/L; but for polypropylene, [C8F17C2H4NMeEt]+I- is used. A Ni plating bath is described containing 1 g C6F13C2H4SO2NH2/L. For cyanide Cu baths, 1 g C6F13C2H4SCN/L may be used.

L18 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1977:554709 CAPLUS
DOCUMENT NUMBER: 87:154709
TITLE: Separation of hydrocarbon phase by coagulation of aqueous emulsions
INVENTOR(S): Roques, Henri; Abadie, Albert; Aurelle, Yves; Calteau, Jean Paul
PATENT ASSIGNEE(S): Agence Nationale de Valorisation de la Recherche, Fr.
SOURCE: Ger. Offen., 21 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2632197	A1	19770210	DE 1976-2632197	19760716
FR 2317955	A1	19770211	FR 1975-22555	19750718
JP 52052182	A2	19770426	JP 1976-85887	19760719

PRIORITY APPLN. INFO.: FR 1975-22555 A 19750718
ABSTRACT:
To increase flow rates during separation of organic phases (especially hydrocarbons) from aqueous

phases by coagulation of emulsions passing through a fine-grain solid bed, the particles in the bed are coated with 0.1-10% fluorinated hydrocarbon derivs. The functional groups form stable chemical bonds to the substrate. Thus, PVC [9002-86-2] spheres of 0.2 mm diameter were coated by immersion in 1% alc. solution of C6F13C2H4SO3C4H9 [50283-30-2], air dried 1 h at room temperature, and air dried 1 h at 50°. A 1-10 μ diameter emulsion of 500 mg kerosine/L water was passed through the bed at 9.65 cm/s. A kerosine separation of 98.5% was obtained. For uncoated PVC spheres, the critical flow rate was only 0.4 cm/s.

L18 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:447311 CAPLUS
DOCUMENT NUMBER: 85:47311
TITLE: Emulsion polymerization or copolymerization of vinylidene fluoride
INVENTOR(S): Blaise, Jean; Grimaud, Edouard
PATENT ASSIGNEE(S): Ugine Kuhlmann, Fr.
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2542280	A1	19760408	DE 1975-2542280	19750923
DE 2542280	B2	19771027		
DE 2542280	C3	19800430		
FR 2286153	A1	19760423	FR 1974-32093	19740924
BE 833252	A1	19760310	BE 1975-159895	19750910
GB 1489957	A	19771026	GB 1975-38604	19750919
US 4025709	A	19770524	US 1975-615206	19750922
CA 1064646	A1	19791016	CA 1975-236026	19750922
SE 7510679	A	19760325	SE 1975-10679	19750923
SE 421427	B	19811221		
SE 421427	C	19820401		
NL 7511197	A	19760326	NL 1975-11197	19750923
NL 191612	B	19950703		
NL 191612	C	19951106		
JP 51057790	A2	19760520	JP 1975-114382	19750923
JP 52024950	B4	19770705		
CH 603705	A	19780831	CH 1975-12316	19750923

PRIORITY APPLN. INFO.: FR 1974-32093 A 19740924
ABSTRACT:
Polymers with controlled mol. weight and good thermal stability are prepared by peroxide-catalyzed emulsion polymerization of CH2:CF2, optionally with ≤15% comonomer, in the presence of 0.02-0.5% (based on H2O) alkali metal or amine salt of RfCH2CH2SO3H (Rf = C4-10 perfluoroalkyl) as emulsifier. Thus, stirring K2S2O8 0.11, NaOAc 0.11, paraffin (m. 54-6°) C8F17CH2CH2SO3Na (I) [27619-96-1] 2.4, and H2O 2000 g with CH2:CF2 at 85-90 atm and 80-5° gives a latex of polymer [24937-79-9] which can be remolded 4 times at 260° without change, held 1 week in boiling H2O without change, and heated 1 hr at 250° without blistering or discoloration. When C7F15CO2Na is used in place of I, the polymer turns gray during remolding, turns reddish-brown in boiling H2O, and becomes brown and slightly blistered at 250°.

L18 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:36743 CAPLUS
DOCUMENT NUMBER: 84:36743
TITLE: Fluorinated additives for surface-treating baths
PATENT ASSIGNEE(S): Societe Continentale Parker, Fr.

SOURCE: Fr. Demande, 13 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2257665	A1	19750808	FR 1974-789	19740110
PRIORITY APPLN. INFO.:			FR 1974-789 A	19740110

ABSTRACT:
Derivs. of fluorinated aliphatic hydrocarbons are surface-active compds. useful in Cr, Ni, or Cu electroplating baths and in etching solns. for plastic parts. Thus, a self-regulated Cr [7440-47-3] plating bath contained CrO3 300, H2SO4 1.75, K2SiF6 1.5, CaCO3 0.7, SrCO3 0.7, and C7F15(CH2)2SO3H 0.1 g/l. A Ni [7440-02-0] plating bath was made from NiSO4 300, NiCl2 70, H3BO3 45, and C6F13(CH2)2SO2NH2 1 g/l. A bath containing CuCN 40, KCN 50, and C6F13(CH2)2SCN 1 g/l. was used for Cu [7440-50-8] plating. The etching of ABS [9003-56-9] parts before metal plating was done in a bath containing CrO3 325, H2SO4 325, and (C8F17(CH2)2N(C2H4OH)2CH3)I 0.5 g/l. For polypropylene [9003-07-0] etching, a solution of CrO3 900, H2SO4 20, and (C8F17(CH2)2N(C2H5)2CH3)I 0.5 g/l. was used.

L18 ANSWER 32 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:539009 CAPLUS
DOCUMENT NUMBER: 83:139009
TITLE: Fluorinated additives for baths for the treatment of surfaces
PATENT ASSIGNEE(S): Societe Continentale Parker, Fr.
SOURCE: Fr. Demande, 12 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2241542	A1	19750321	FR 1973-25763	19730713
FR 2241542	B1	19760618		
BE 814801	A1	19740902	BE 1974-144139	19740509
PRIORITY APPLN. INFO.:			FR 1973-25763 A	19730713

ABSTRACT:
Fluorinated surface tension lowering agents are disclosed which, when added to a title bath improve the efficiency, have the formula: [CnF2n + 1(CH2)bSO2 Z]dM where (CnF2n+1) is a perfluorinated straight or branched chain radical, n = 1-20, b = 2-20, Z = Cl, Br, or O and when Z = Cl or Br, there is no cation M and d = 1, or when Z = O, M = H and d = 1 or M is a metal of Groups IA, IIA, IB, IIB, VIII, Al, Pb, and d = the valence of the metal. Thus, a Cr [7440-47-3] electroplating bath containing CrO3 300, H2SO4 3, F(CF2)6C2H4SO3H 0.1 g/l. has a surface tension of 25 dynes/cm initially and 32 dynes/cm. after passage of a current of 40 A/hr compared to a similar bath containing 0.1 g/l. of H(CF2CF2)3P(O)(OH)2 which has corresponding values of 47 and 60 dynes/cm. resp.

L18 ANSWER 33 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:147109 CAPLUS
DOCUMENT NUMBER: 82:147109
TITLE: Electrolytic surface treatment of aluminum
INVENTOR(S): Patrie, Jos; Lefebvre, Jacques; Allegret, Francois
PATENT ASSIGNEE(S): Ugine Kuhlmann
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2433491	A1	19750130	DE 1974-2433491	19740712
DE 2433491	B2	19771013		
FR 2241633	A1	19750321	FR 1973-25800	19730713
BE 816417	A1	19741016	BE 1974-145493	19740617
IT 1014404	A	19770420	IT 1974-69037	19740627
GB 1427909	A	19760310	GB 1974-29133	19740701
US 3899400	A	19750812	US 1974-486741	19740709
NL 7409460	A	19750115	NL 1974-9460	19740712
NL 176693	B	19841217		
NL 176693	C	19850517		
BR 7405759	A0	19750520	BR 1974-5759	19740712
CH 586289	A	19770331	CH 1974-9681	19740712
CA 1050479	A1	19790313	CA 1974-204631	19740712
JP 50043022	A2	19750418	JP 1974-79770	19740713
JP 54039816	B4	19791130		

PRIORITY APPLN. INFO.: FR 1973-25800 A 19730713

ABSTRACT:
Decorative lizard skin-appearing surfaces on Al [7429-90-5] and Al alloys, useful also as pretreatment for anodic oxidation, coloring, or lacquering, were made by a.c. electrolysis in a bath containing HNO3 or HCl 4.4-8 and C6F13CH2CH2SO3H (I) [**27619-97-2**] 1 g/l. for 0.5-2 min at 14-40°, 1.2-4.6 A/dm2, and 10-25 V. Thus, electrolysis of a Al 99, Mn 1 alloy [11114-64-0] plate vs. a graphite electrode in bath containing HNO3 7 and I 1 g/l. 1 min at 20°, 1.2 A/dm2, and 10 V gave a light-gray lizard skin-appearing surface.

L18 ANSWER 34 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:404890 CAPLUS
DOCUMENT NUMBER: 81:4890
TITLE: Mixture of fluorinated surface-active compounds for preparing fire-extinguishing agents
INVENTOR(S): Foulletier, Louis; Bertocchio, Rene
PATENT ASSIGNEE(S): Ugine Kuhlmann
SOURCE: Ger. Offen., 25 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2325855	A1	19731206	DE 1973-2325855	19730522
DE 2325855	B2	19751120		
DE 2325855	C3	19760701		
FR 2185668	A1	19740104	FR 1972-18242	19720523
FR 2185668	B1	19790216		
BE 799476	A1	19730831	BE 1973-131057	19730514
NL 7307139	A	19731127	NL 1973-7139	19730522
IT 991596	A	19750830	IT 1973-68491	19730522
CH 569075	A	19751114	CH 1973-7272	19730522
GB 1439357	A	19760616	GB 1973-24376	19730522
CA 1001920	A1	19761221	CA 1973-172360	19730522
JP 49042190	A2	19740420	JP 1973-56923	19730523
JP 52007873	B4	19770304		
US 3941705	A	19760302	US 1975-559565	19750318

PRIORITY APPLN. INFO.: FR 1972-18242 A 19720523
US 1973-361135 A1 19730517

ABSTRACT:
Mixts. of 1-carboxy-N,N-dimethyl-N-[3-[3-(perfluorooctyl)propionylamino]propyl]-2-ethanaminium [34520-17-7] 35-60, 3,6,9,12,15,18,21-heptaoxadocosyl 3-(perfluorohexyl)propionate [51541-54-9] 20-40, and 1-carboxy-N,N-dimethyl-N-[3-[3-(perfluorohexyl)propionyloxyammonio]propyl]-2-ethanaminium [51541-56-1] or N-[3-(dimethylamino)propyl]ammonium 3-(perfluorohexyl)propionate [51541-57-2] 8-40% are useful as films on the surfaces of volatile hydrocarbon liqs. to minimize evaporation and as foamable aqueous solns. for preventing or extinguishing fires, e.g., burning liquid hydrocarbons. Thus, water containing 0.3% iso-PrOH and 0.5% of a mixture of C8F17C2H4CONH(CH2)3N+Me2CH2CH2CO20 68, C6F13C2H4CO2(CH2CH2O)7Me 18, and C6F13C2H4CO2NH3(CH2)3N+Me2CH2CH2CO2- 14% formed a foam which inhibited the evaporation of cyclohexane or gasoline and protected the liquid hydrocarbons from ignition in the vicinity of a flame.

L18 ANSWER 35 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:61204 CAPLUS
DOCUMENT NUMBER: 80:61204
TITLE: Fluorocarbon coatings on metal surfaces
INVENTOR(S): Foulletier, Louis; Lantz, Andre
PATENT ASSIGNEE(S): Ugine Kuhlmann
SOURCE: Fr., 13 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2163808	A5	19730727	FR 1971-43253	19711202

PRIORITY APPLN. INFO.: FR 1971-43253 A 19711202

ABSTRACT:
The surfaces of steel, stainless steel, and copper were rendered hydrophobic by treatment with alc. solns. of fluorocarbons with terminal functional groups which formed stable complexes with the metal substrate. Stainless steel was coated with solns. of fluorocarbons such as C8F17(C2H4)5CO2H, C6F13C2H4SO2NH(CH2)6OH, and C6F13C2H4SO2N(Me)C2H4OH. The coatings were not removed by water or CCl4, and were removed to some extent by HCl, NaOH, C2HCl3, and Me2CO.

L18 ANSWER 36 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:48355 CAPLUS
DOCUMENT NUMBER: 78:48355
TITLE: Adsorption of polyfluorinated organic compounds on nickel in solution. II. Experimental results and discussion
AUTHOR(S): Chabert, Pierre; Gravelle, Pierre C.
CORPORATE SOURCE: Dep. Chim.-Phys., Inst. Rech. Catal., Villeurbanne, Fr.
SOURCE: Bulletin de la Societe Chimique de France (1972), (10), 3760-6
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French

ABSTRACT:
In solns. [(1-40) + 10-3 M] of C8F17(CH2)2X (e.g., X = OH, NH(CH2)2OH, NHPh, SO2NH2, CO2H, SO3H), C6H13(CH2)2SO2NH2, C8F17(CH2)4CO2H, or C8F17CHClCH2OPO3H2 in C6H6 or MeOH at 23-35°, the adsorption or reaction [determined by the previously described (C. and G., 1972) spectrophotometric methods] of the fluorinated surfactant with powdered Ni (Raney Ni, or Ni prepared

by reduction of NiO with H) depended essentially on the basic, acidic, or neutral nature of the functional group (X), and was essentially the same as the behavior of the corresponding nonfluorinated compound with the same functional group. The compds. with strong acid groups reacted chemical with the Ni and formed Ni soaps. If the soaps were soluble in the solvent or did not form protective coatings on the metal, the reaction was not limited to the metal-solution interface. The compds. with basic, neutral, or weakly acidic groups adsorbed reversibly on the Ni. The adsorption isotherms obeyed the Langmuir model. The mols. were always adsorbed with their long axes nearly perpendicular to the Ni surface. The perfluoroalkyl groups extended outwards and formed a chemical inert surface.

L18 ANSWER 37 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:48352 CAPLUS
DOCUMENT NUMBER: 78:48352
TITLE: Adsorption of polyfluorinated organic compounds on nickel in solution. I. Raw materials and experimental techniques
AUTHOR(S): Chabert, Pierre; Gravelle, Pierre C.
CORPORATE SOURCE: Dep. Chim.-Phys., Inst. Rech. Catal., Villeurbanne, Fr.
SOURCE: Bulletin de la Societe Chimique de France (1972), (10), 3752-9
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
ABSTRACT:
The adsorption, at 20-30°, of C8F17(CH2)2X (e.g., X = OH, NH(CH2)2OH, NHPh, SO2NH2, CO2H, SO3H), C6F13(CH2)2SO2NH2, C8F17(CH2)4CO2H, or C8F17CHClCH2OPO3H2, at concns. of 0.5 + 10-3M in purified C6H6 or MeOH, on powdered Ni [Raney Ni with sp. surface area S = 39 m2/g; Ni prepared by reduction of
NiO with H, S = 1.9 m2/g] was determined (with an error of 2-3%) by measuring the intensities of the IR absorption bands at 1000-1400 cm-1 of the C-F bonds of the perfluoroalkyl groups in the surfactants in solution before and after equilibration with the powdered Ni. After equilibration of the MeOH solns., the supernatant solution was removed and evaporated to dryness, and the residual fluorinated surfactant was dissolved in MeCN and determined spectrophotometrically. The S values were determined in C6H6 solns. of stearic acid, palmitic acid, or myristic acid by measuring the IR absorption intensities at 1600-1800 cm-1 in solution before and after equilibrium adsorption of the fatty acid on the powdered Ni.

L18 ANSWER 38 OF 38 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1970:110792 CAPLUS
DOCUMENT NUMBER: 72:110792
TITLE: Polyfluoroalkanesulfonic acid derivatives
INVENTOR(S): Foulletier, Louis; Lalu, Jean P.
PATENT ASSIGNEE(S): Ugine Kuhlmann
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1942264	A	19700226	DE 1969-1942264	19690820
DE 1942264	B2	19800529		
DE 1942264	C3	19810129		
FR 1600425	A	19700727	FR 1968-163587	19680821

NL 6911487	A	19700224	NL 1969-11487		19690725
NL 167686	B	19810817			
NL 167686	C	19820118			
GB 1251874	A	19711103	GB 1969-1251874		19690731
BE 737014	A	19700116	BE 1969-737014		19690804
US 3825577	A	19740723	US 1971-143589		19710514
US 4610829	A	19860909	US 1978-966508		19781204
PRIORITY APPLN. INFO.:			FR 1968-163587	A	19680821
			US 1969-851081	A3	19690818
			US 1972-312880	A1	19721207

ABSTRACT:
Derivs. of polyfluorosulfonic acids, CnF2n+1-(CH2)bSO3H, are prepd . Thus, Cl at 4 l./hr is fed into a mixture of 30.5 g C4F9C2H4SCN, 100 ml AcOH, and 12 ml H2O at 50° 3.5 hr; a fraction b20 90-5°, gives C4 F9C2H4Cl (3.4%), C4F9-C2H4SCN (12.3%), and C4F9C2H4SO2C l (84.3%). A mixture of 27.4 g C2F5C2H4I, 25 g Na2SO3, 50 ml H2O, 50 ml EtOH, and 1 g Cu turnings is heated at 78° 48 hr to give 20.1 g C2F5C2H4-SO3Na. Also, 20 ml 10N NaOH is added to 10.93 g C8F17C2H4-SO2Cl to yield 10.9 g C8F17C2H4SO3Na. C6F13C2H4SO3H is prepared by hydrolysis.

Zonyl® MSDS retrieved on 3 Apr 2006 from:

http://52.128.224.157/msds/pdfs/EN/PEN_09004a2f80006397.pdf

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

"Zonyl" FS-62
0542PP Revised 10-FEB-2005

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"Zonyl" is a registered trademark of DuPont.

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS
Product Information : 1-800-441-7515 (outside the U.S. 302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S. 703-527-3887)
Medical Emergency : 1-800-441-3637 (outside the U.S. 302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Perfluorohexylethylsulfonic Acid	27619-97-2	12-18
Ammonium Perfluorohexylethylsulfonate	59587-39-2	6-9
Perfluorooctylethylsulphonic Acid	39108-34-4	1-3
Ammoniumperfluorooctylethylsulphonate	149724-40-3	1-3
Acetic Acid	64-19-7	1-3
Water	7732-18-5	60-85

HAZARDS IDENTIFICATION

Potential Health Effects

Based on the pH of the slurry, "Zonyl" FS-62 may cause eye corrosion or ulceration.

Based on the pH of the slurry, "Zonyl" FS-62 may cause skin skin corrosion, burns or ulcers.

Ingestion of "Zonyl" FS-62 may cause burns of the mouth, throat, esophagus and stomach, with severe pain, nausea, vomiting, diarrhea or internal bleeding. Ingestion of high doses may cause hematological changes and abnormal kidney, or liver function with altered results on blood tests.

(HAZARDS IDENTIFICATION - Continued)

Based on related products, inhalation of spray or mist may cause nasal, throat, or lung irritation. Inhalation of large amounts of respirable particles may be toxic to the lungs. Symptoms may be modest initially, followed in hours by severe shortness of breath requiring prompt medical attention.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physicians

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : Does not ignite.

Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, and throat irritation or toxic effects.

Extinguishing Media

Use media appropriate for surrounding material.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Soak up with sawdust, sand, oil dry or other absorbent material.

This material is an ICR (ignitable, corrosive, reactive) substance under CERCLA. Unless released material is immediately cleaned up for reprocessing, recycling, or reuse, a release of 100 lbs. may trigger the reporting requirements of CERCLA Section 103.

HANDLING AND STORAGE

Handling (Personnel)

Do not get in eyes. Avoid breathing vapors or mist. Avoid contact with skin. Avoid contact with clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Avoid circumstances that produce respirable particles unless suitable ventilation and respirator

(HANDLING AND STORAGE - Continued)

are used.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Keep container tightly closed. Use only with adequate ventilation. Vent heated extruder or dryer fumes outside work area. Do not aerosolize. In spray applications, use airless type pressure spray equipment at less than 60 psi, and exhaust ducts, drip pans, or other design features to minimize worker exposure to mists and overspray.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses or where splash potential exists wear chemical splash goggles.

RESPIRATORS

Wear NIOSH approved respiratory protection, as appropriate.

PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.

Exposure Guidelines

Applicable Exposure Limits

Acetic Acid

PEL	(OSHA)	: 10 ppm, 25 mg/m3, 8 Hr. TWA
TLV	(ACGIH)	: 10 ppm, 25 mg/m3, 8 Hr. TWA STEL 15 ppm, 37 mg/m3
AEL *	(DuPont)	: 10 ppm, 8 & 12 Hr. TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

Exposure Guideline Comments

No AEL has been established for this product. Other products with fluorinated material components have an AEL of 0.1 mg/m3 to 1 mg/m3 (8 hour TWA) for respirable size aerosol particles.

Air monitoring studies conducted at customer sites indicates that the use of the recommended low pressure (less than 60 psi) airless type, garden type or deck

(Applicable Exposure Limits - Continued)

specific hand pump sprayer with spray tip orifice minimum of 0.031 inches in diameter does not produce respirable size aerosol particle concentrations near the AEL.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	: 100 C (212 F)
Melting Point	: 0 C (32 F)
Freezing Point	: 0 C (32 F)
% Volatiles	: 60 - 85%
Solubility in Water	: Significant
pH	: 1
Odor	: Acetic Acid
Form	: Solution or Slurry in Water
Color	: White to Yellow
Specific Gravity	: >1

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

Incompatible with alkalies and reactive metals.

Decomposition

Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, throat, and lung irritation or toxic effects.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Dermal ALD: >2000 mg/kg in rabbits
Oral ALD: 1000 mg/kg in rats

"Zonyl" FS-62 is not a skin irritant or skin sensitizer in tests with animals. Single high ingestion doses of "Zonyl" FS-62 caused hunched posture, thin appearance, salivation, waddling and unsteady gait. Repeated dosing at 50, or 150

(TOXICOLOGICAL INFORMATION - Continued)

mg/kg caused body weight changes, hematological and clinical chemical changes, increased liver and kidney weight, and microscopic evidence of kidney toxicity. The NOAEL was 15 mg/kg. "Zonyl" FS-62 administered in a single high dose to the skin of rats produced slight to moderate irritation and bodyweight fluctuations. No animal data are available to define the carcinogenicity, developmental, or reproductive hazards of "Zonyl" FS-62. "Zonyl" FS-62 did not produce genetic damage in bacterial cell cultures but did produce genetic damage in mammalian cell cultures. An in vivo test with "Zonyl" FS-62 did not produce chromosome damage or bone marrow cell toxicity.

ECOLOGICAL INFORMATION

Ecotoxicological Information

96 hour LC50 - Rainbow trout: > 94.1 mg/L.
48 hour EC50 - Daphnia magna: > 85.9 mg/L

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

May be a RCRA Hazardous waste due to corrosivity characteristic.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO/IATA

Proper Shipping Name	: Corrosive Liquid, Acidic, Organic, N.O.S. (Sulphonates)
Hazard Class	: 8
UN No.	: 3265
Packing Group	: III
Label(s)	: Corrosive

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Listed.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute	: Yes
Chronic	: No
Fire	: No
Reactivity	: No
Pressure	: No

OTHER INFORMATION

NFPA, NPCA-HMIS

NPCA-HMIS Rating

Health	: 2
Flammability	: 0
Reactivity	: 0

Personal Protection rating to be supplied by user depending on use conditions.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : MSDS Coordinator
Address : DuPont Chemical Solutions Enterprise
Wilmington, De. 19898
Telephone : 800-441-7515

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS